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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,883	10/18/2001	Mark A. Carlson	P5758	4283

45774 7590 10/07/2005

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EXAMINER

TRAN, PHILIP B

ART UNIT PAPER NUMBER

2155

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,883

Applicant(s)

CARLSON ET AL.

Examiner

Philip B. Tran

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/11/02; 5/3/04; 6/22/05 & 7/19/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

RD

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-54 are rejected under 35 U.S.C. § 102(e) as being anticipated by Wolff, U.S. Pat. No. 6,067,545.

Regarding claim 1, Wolff teaches a method for configuring multiple resources in a system, comprising: providing a plurality of elements capable of configuring resources in the system, wherein each element specifies configuration parameters to use to configure instances of the resource, and wherein each resource is capable of being configured by multiple elements that provide a different configuration of the resource; maintaining service information indicating at least one service attribute that results from the configuration of the

resource by the element; receiving at least one specified service attribute for a configuration; determining at least one element for each resource having service information indicating at least one performance and availability attribute that satisfies the at least one administrator specified service attribute; determining resource instances capable of being configured by the determined elements; and using the determined elements to configure the selected resource instances to implement the specified service attributes (= determining available resources, managing resources and applying a load balancing function to the network responsive to attributes of server nodes and resources) [see Abstract and Col. 6, Lines 6-67].

Regarding claim 2, Wolff further teaches the method of claim 1, further comprising: receiving information indicating a specified host from the administrator for which the resources will be configured, and wherein the configured resource instances are used by the specified host [see Col. 7, Lines 15-33].

Regarding claims 3-4, Wolff further teaches the method of claim 1, wherein at least one resource to configure comprises a storage resource, wherein storage elements are capable of providing different configurations of the storage resources, further comprising: determining total available storage space at the determined storage resource instances; presenting information on the total available storage space; and receiving administrator input in response to the

presented information indicating selected storage space less than the available storage space to allocate and determining storage resource instances capable of being configured by the determined storage element to allocate the administrator selected storage space [see Abstract and Col. 6, Line 47 to Col. 7, Line 14].

Regarding claim 5, Wolff further teaches the method of claim 1, wherein at least one resource comprises a switch, wherein the service information for switch elements that configure the switch resource indicates a data throughput of the switch, wherein the administrator specified service attribute indicates a specified data throughput, wherein the determined switch element has service information that satisfies the specified data throughput, and wherein the determined switch element configures at least one switch instance to provide the specified data throughput [see Col. 4, Line 49 to Col. 5, Line 22].

Regarding claims 6-7, Wolff further teaches the method of claim 1, wherein at least one resource comprises a host adaptor in a host, wherein the resources are being configured for use by the host, wherein the service information for switch elements that configure the switch resource indicates one of multiple availability levels, wherein the administrator specified service attribute indicates a specified availability level, wherein the determined host adaptor element has service information that satisfies the specified availability level, and wherein the determined host adaptor element configures at least one host adaptor instance in the host to provide the administrator specified availability

level and wherein the administrator specified availability level defines redundant paths from the host to storage resources, and wherein the determined host adaptor element configures multiple host adaptors in the host to enable multiple paths to communicate with the storage resource [see Abstract and Col. 53, Line 45 to Col. 54, Line 31].

Regarding claims 8-9, Wolff further teaches the method of claim 1, wherein at least one resource comprises a switch, wherein the service attributes in the service information for switch elements that configure the switch resource indicates an availability level indicating whether redundant switch components are provided with the configuration, wherein the administrator specified service attribute indicates one specified availability level, wherein the determined switch element has service information that satisfies the specified availability level, and wherein the determined switch element configures switch components to provide the specified availability level and wherein at least one of the determined resources comprises a storage resource, wherein the service information associated with storage elements that configure the storage resource includes at least one service attribute indicating an availability attribute, wherein the administrator specified service attributes for the storage resource indicates one specified availability level, and wherein the selected storage element that configures the storage resource has service information that satisfies the administrator specified availability level [see Col. 6, Line 6 to Col. 7, Line 33].

Regarding claims 10-11, Wolff further teaches the method of claim 1, wherein the resources to configure are members of the set of configurable resources comprising a host adaptor, switch, storage resource, virtualization appliance, volume manager, and snapshot program and wherein the resources to configure include a host adaptor, switch, and storage device, wherein the administrator specified service attribute includes one of a first availability option, second availability option, and third availability option, wherein the first availability option does not define any data and hardware redundancy, wherein the second availability option defines data redundancy for the configured storage device, and wherein the third availability option defines data redundancy of the configured storage device and redundancy of at least one other switch or host adaptor component [see Abstract and Col. 6, Line 6 to Col. 7, Line 33 and Col. 53, Line 45 to Col. 54, Line 31].

Regarding claims 12-13, Wolff further teaches the method of claim 1, wherein the administrator specified at least one service attribute indicates availability and performance for the host adaptor, switch, and storage devices to configure for a host, and wherein the determined elements for configuring the host adaptor, switch, and storage devices have service information that satisfies the administrator specified availability and performance attributes for the host adaptor, switch, and storage device and wherein the administrator specified service attribute indicates to provide a redundant instance of at least one resource, and wherein at least one determined element has service information

indicating a redundant instance of the at least one resource indicated as redundant by the administrator specified availability [see Col. 6, Line 47 to Col. 7, Line 33].

Regarding claim 14, Wolff further teaches the method of claim 1, further comprising: registering, with each element, a proxy object including interfaces used to access the element with a lookup service, wherein the proxy object includes the service information, and wherein the elements are used to configure the selected resources by using the interfaces for the elements maintained in the element proxy objects [see Col. 6, Lines 6-46].

Claim 15 is rejected under the same rationale set forth above to claim 1 wherein Wolff further discloses a resource is a storage resource [see Figs. 11-12]

Regarding claim 16, Wolff further teaches the method of claim 15, wherein the administrator specified service attribute indicates a level of data redundancy for the storage resource to configure [see Col. 6, Line 6 to Col. 7, Line 14].

Regarding claim 17, Wolff further teaches the method of claim 15, wherein the at least one service attribute in the service information indicates at least one performance and availability attribute resulting from the configuration of the resource by the element [see Abstract].

Regarding claim 18, Wolff further teaches the method of claim 15, wherein the configurable storage resources comprise virtualization appliances [see Col. 15, Line 39 to Col. 16, Line 35].

Claims 19-32 are rejected under the same rationale set forth above to claims 1-14, respectively.

Claims 33-36 are rejected under the same rationale set forth above to claims 15-18, respectively.

Claims 37-50 are rejected under the same rationale set forth above to claims 1-14, respectively.

Claims 51-54 are rejected under the same rationale set forth above to claims 15-18, respectively.

Other References Cited

3. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Cheng et al, U.S. Pat. No. 6,775,700.

B) Blumenau et al, U.S. Pat. No. 6,845,395.

C) Win et al, U.S. Pat. 6,182,142.

D) Schneider et al, U.S. Pat. No. 6,408,336.

E) Gullotta et al, U.S. Pat. Application Pub. No. US 2002/0147801 A1.

4. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (703) 872-9306. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached on (571) 272-4006.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Philip B. Tran

Art Unit 2155

September 29, 2005